

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

1. (Currently Amended) ~~A cartridge~~Cartridge case (2) and ammunition round (1) primarily for at least one of electrothermal and/or electrothermochemical weapon systems comprising:

a chamber (17) for the ammunition round (1), which round (1) comprises the said cartridge case (2) having a casing (10), and a bottom or a bottom piece (16), and a firing device (5), which firing device (5) comprises an electric connection (19) by means of which the ammunition round (1), once introduced into the chamber (17) of a weapon concerned, is in electric contact with the weapon,

~~wherein characterized in that~~ the casing (10) including the bottom or the bottom piece (16) comprises ~~or consists of~~ one or more insulated or insulating shells, layers or surfaces (11, 12, 13) for, at least electrically, insulating both the casing (10) of the cartridge case (2) and its bottom or bottom piece (16) from the rest of the ammunition round (1) including its firing device (5) when the round (1) is stored and handled and, when the round (1) is used, from the a barrel (14) of the weapon system as well,

wherein the casing (10) of the cartridge case (2) comprises a load-bearing case shell (11) in the form of a cartridge case (2) manufactured from an electrically conductive metal of which at least one inner or outer coating, surface or layer (12,13) is dielectric for the electric insulation of the cartridge case (2) in relation to the barrel (14) and also to the rest of the ammunition round (1) including the firing device (5) and the ammunition round (1).

2. (Cancelled)

3. (Currently Amended) ~~The cartridge~~ Cartridge case (2) and ammunition round (1) according to Claim 1, ~~characterized in that~~wherein the cartridge case (2) has ~~a~~the casing (10) which comprises at least one inner and/or outer coating, surface or layer (12, 13) which is a mechanically applied layer, ~~or~~ a chemically applied layer or electrochemically applied surface.

4. (Currently Amended) ~~The cartridge~~ Cartridge case (2) and ammunition round (1) according to Claim 1, ~~wherein~~ characterized in that ~~the~~ at least one inner and/or outer coating, surface or layer (12, 13) comprises a material applied by phase transformation, including ~~such as~~ vaporization ~~and/or~~ condensation to form an insulating film (12, 13), preferably a dimeric or polymeric raw material comprising hydrocarbons, ~~such as~~including poly-parasylylene or another suitable plastic.

5. (Currently Amended) ~~The cartridge~~ Cartridge case (2) and ammunition round (1) according to Claim 1, ~~characterized in that~~wherein the at least one inner- ~~and/or~~ outer shell or layer (11, 12, 13) comprises shape-imitating shrink film or flexible tube (11, 12, 13) made of preferably non-conductive material, ~~such as~~including rubber or plastic.

6. (Currently Amended) ~~The cartridge~~ Cartridge case (2) and ammunition round (1) according to Claim 1, ~~characterized in that~~wherein the casing (10) of the cartridge case (2) comprises ~~or comprises~~ a non-conductive or electrically insulating load-bearing material, shell, layer or surfaces (11, 12, 13), ~~such as~~including hard plastic, ceramic, rigid rubber, or fiber composite, etc.

7. (Currently Amended) ~~The cartridge~~ Cartridge case (2) and ammunition round (1) according to Claim 1, ~~characterized in that~~wherein the casing (10) of the cartridge case (2)

comprises a relatively flexible non-conductive or electrically insulating shell or layer (11, 12, 13) which is constructed from a glass-fiber laminate.

8. (Currently Amended) ~~The cartridge~~ Cartridge case (2) and ammunition round (1) according to Claim 7, ~~characterized in that~~ wherein the casing (10) of the cartridge case (2) has a glass-fiber thread winding which is arranged along the case jacket (15) at a winding angle α defined for each ply to the longitudinal axis Y of the case (2).

9. (Currently Amended) ~~The cartridge~~ Cartridge case (2) and ammunition round (1) according to Claim 1, ~~characterized in that~~ wherein the firing device (5) is arranged detachably on a bottom (16) integrated with the casing (10) of the cartridge case (2).

10. (Currently Amended) ~~The cartridge~~ Cartridge case (2) and ammunition round (1) according to Claim 1, ~~characterized in that~~ wherein the firing device (5) is arranged detachably on a separate bottom piece (16) arranged demountably with the casing (10) of the cartridge case (2).

11. (Currently Amended) ~~An ammunition~~ Ammunition round (1) with cartridge case (2) according to Claim 5, ~~characterized in that~~ wherein the round (1) comprises a propellant charge (7) and that the shrink film or the tube (11, 12, 13) is arranged on the outside of the said propellant charge (7).

12. (Currently Amended) ~~The ammunition~~ Ammunition round (1) with cartridge case (2) according to Claim 11, ~~characterized in that~~ wherein the propellant charge (7) comprises a cartridge-shaped charge which is surrounded by the shrink film or the flexible tube (11, 12, 13)

for forming at least one of a cartridge-shaped, and if appropriate or vacuum-packed; round (1) which stands up to normal handling of the round (1).

13. (Currently Amended) ~~The cartridge~~Cartridge case (2) and ammunition round (1) according to Claim 1, ~~wherein~~characterized in that the bottom piece (16) is made of glass-fiber epoxy, and arranged tightly on the casing (10) in a tight-fitting manner by a connection means ~~of including screw-thread cutting, or adhesive bonding or by means of another connection~~ suitable for the function.

14. (Cancelled)

15. (Currently Amended) ~~The ammunition~~Ammunition round (1) with cartridge case (2) according to Claim 1, ~~characterized in that~~wherein the firing device (5) comprises a plasma torch (5).

16. (Currently Amended) ~~Ammunition~~The ammunition round (1) with cartridge case (2) according to Claim 1, ~~characterized in that~~wherein the firing device (5) of the ammunition round (1) comprises a fuse for use of the cartridge case (2) and the ammunition round (1) ~~in other more conventional weapon systems than the said electrothermal and/or electrothermochemical weapon systems.~~

17. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) primarily for electrothermal and/or electrothermochemical weapon systems, which round (1) comprises a cartridge case (2) according to Claim 1, characterized in that at least one

of the shells or layers (11, 12, 13) which form part of the casing (10) of the cartridge case (2) is manufactured by glass-fiber thread being wound with resin in layers with varying winding angles α sandwiched with woven glass-fiber fabric so that a plurality of winding plies/laminate layers (11, 12, 13) are obtained after hardening.

18. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) according to Claim 17, characterized in that for every such winding ply/laminate layer (11, 12, 13), a fiber winding with fiber angles of essentially roughly 90° to the longitudinal axis of the tube on the inside and \pm roughly $15-25^\circ$, preferably $\pm 20^\circ$, on the outside is selected, and in that a number of such winding plies (11, 12, 13) are laid on top of one another and sandwiched with woven glass-fiber fabric between a number of the thread-winding plies so that an essentially flexible case jacket (15) is obtained, as a result of which the casing (10) of a round (1) introduced into the cartridge chamber tolerates being expanded towards the walls of the cartridge chamber by the inner overpressure inside the cartridge case (2) brought about when firing takes place without for that reason cracking, delaminating or disintegrating.

19. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) according to Claim 1, characterized in that at least one of the shells or layers (11, 12, 13) which form part of the casing (10) of the cartridge case (2) is manufactured by a glass-fiber being applied to a winding and shaping tool which is rotated while the fabric is draped over it, the last piece of the woven glass-fiber fabric being laid so that a small overlay is formed, after which a first winding ply of glass-fiber thread in resin is wound with a fiber angle to the longitudinal axis of the tube of essentially 90° , followed by two or more winding plies of thread with a fiber angle, which is varied for the component plies, of on the one hand roughly $+15-25^\circ$, preferably $+20^\circ$, after which the subsequent, winding plies/laminate layers (11, 12, 13) are also given a fiber winding with a fiber angle to the longitudinal axis of the tube which varies between essentially roughly 90° and \pm roughly $15-25^\circ$, preferably $\pm 20^\circ$, as the thickness of the casing (10) is built up to roughly half-thickness, after which woven glass-fiber fabric is sandwiched

with fiber windings with a fiber angle of essentially 90° until full shell or layer (11, 12, 13) thickness has been achieved.

20. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) according to Claim 1, characterized in that a relatively low winding speed is used, preferably roughly 4-6 m/min, while a relatively high thread tension, roughly 21-23 N/roving, and a hardening cycle which comprises a plurality of hardenings at increasing temperatures are selected.

21. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) according to Claim 20, characterized in that use is made of a hardening cycle of roughly 5 hours at roughly 80°, followed by roughly 5 hours at roughly 120°, after which after-hardening takes place for roughly 4 hours at roughly 140°.

22. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) according to Claim 1, characterized in that after shaping of a blank for the casing (10), this is cut and/or turned/ground to essentially the desired length, thickness and predetermined shape, after which a bottom piece (16) is mounted on the rear end (6) of the casing (10) in a tight-fitting manner, preferably by adhesive bonding or screw-thread cutting.

23. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) according to Claim 1, characterized in that the bottom piece (16) is manufactured from glass-fiber epoxy, either by glass-fiber thread and/or woven glass-fiber fabric being given during shaping the form of a hammock where only tensile loads in the fibers can occur or by glass-fiber thread and/or woven glass-fiber fabric being given during shaping the form of a plane bottom so that pressure loads also can occur, after which the bottom piece (16), after shaping and hardening have been completed, is then turned out.

24. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) comprises a cartridge case (2) according to Claim 1, characterized in that an insulation coating (12, 13) is applied over all the shell or layer surfaces of the cartridge case (2) concerned which are accessible to gas by phase transformation via a number of phases, a dimeric or polymeric raw material being vaporized so that the polymer or the dimmer is first transformed from solid phase to gas phase and then, at a further increased temperature, is transformed to a reactive monomer gas which is made to condense and polymerize, a thin insulating plastic film layer (12, 13) being deposited on all the free surfaces of the cartridge case (2).

25. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) according to Claim 24, characterized in that the condensation of the reactive monomer gas to form an insulating film (12, 13) takes place under low pressure, preferably in a vacuum.

26. (Previously Presented) Method for manufacturing a cartridge case (2) and an ammunition round (1) primarily for electrothermal and/or electrothermochemical weapon systems, which round (1) comprises a cartridge case (2) according to Claim 1, characterized in that an insulation coating (12, 13) is applied over all the shell or layer surfaces of the cartridge case (2) concerned which are accessible to gas by phase transformation via a number of phases, a

dimeric or polymeric raw material being vaporized so that the polymer or the dimer is first transformed from solid phase to gas phase and then, at a further increased temperature, is transformed to a reactive monomer gas which is made to condense and polymerize, a thin insulating plastic film layer (12, 13) being deposited on all the free surfaces of the cartridge case (2).

27. (Withdrawn) Method for manufacturing a cartridge case (2) and an ammunition round (1) according to Claim 26, characterized in that the condensation of the reactive monomer gas to form an insulating film (12, 13) takes place under low pressure, preferably in a vacuum.